CHAPTER 3

VAX-2000 COMPUTER SYSTEM

3.1 Introduction

This chapter described the fundamental knowledge about the VAX computer system, how to enter the VAX computer system, basic VAX/VMS commands and how to run Simpow

3.2 The VAX computer system

The VAX computer system contains the following main parts.

- VAX-station 2000 system unit with CPU including 6 Mb of main memory and 160 Mb of diskmemory.
- Extension box cabinet including TK 50 tape cartridge unit.
- Console Keyboard, Graphic Monitor and Mouse.
- Laser printer.

3.3 How to enter the VAX computer system

The VAX computer is accessed from console keyboard .

3.3.1 The console terminal

The console terminal is a graphic device which is operated by using the keyboard and the mouse.

The workstation options menu is the main menu of the workstation.

To invoke the workstation option menu, place the arrow pointer, by moving the mouse, in a blank area of the screen and press the left buttom on the mouse, A blank area of the screen means in the light gray area outside any existing window.

Now move the arrow pointer inside the options menu untill the black bar cover the following option :

Create new VT220 window (without autologin)

Then press the left buttom on the mouse again and a new terminal window will show up on the screen.

3.3.2 Logging into the system

In the terminal window a system prompt will show up and the username can be introduced as follow :

Username : THESIS

Password :

The system now prompts for a password and the password is entered,followed by the return key. The password will not be displayed on the screen for security reasons. Now the system prompt($) will show up in the terminal window to tell the engineers that the system is ready to read commands.

3.4 Basic VAX/VMS commands

After passing the log-in, the system can be communicated by entering commands from the keyboard. The command language is called DCL. When the DCL dollar sign prompt ($), A command can be typed followed by the return key. When the dollar sign prompt reappears, the system is ready for another choice of command.A list of all the DCL commands will appear by using the command HELP as follows :

$ HELP

Other usefull commands are

$ EDIT FILE1.DAT

This command will start the text editor EDT and open a copy of the text file FILE1.DAT if the file exist or a new file will be created.

$ LOGOUT

The LOGOUT command is used to close the session and to assure

that the data and result files are secured.

3.5 How to run SIMPOW

The SIMPOW is started by the following command.

$ SIMPOW

Then the screen will show the following prompt

SIMPOW COMMAND ?

Simpow now expects the name of selected function, the name of the job and names of related files.

A proper command string for a loadflow calculation could look like this.

$ SIMPOW

Press the return key, then the screen will show the following prompt.

SIMPOW COMMANDED ?

Insert the following command.

FUNC = O JOB = CASE1 MODE = O RUN

The command items have the following meaning.

FUNC = O   Start an OPTPOW or load flow run.

JOB = CASE1   Job identification for result files.

MODE = 0   The result will be shown on a laser printer.

RUN   Start calculation

SIMPOW will now run a load flow case called CASE1. When job CASE1 finished a load flow calculation, the screen will show the following prompt.

*** JOB CASE1 COMPLETED ***

The following commands should be inserted to get a printout of the input data and the load flow solution.

$ PRINT CASE1.OPTPOW
$ PRINT OPTPOW.CASE1

The result file has the file name OPTPOW the job name and as file type. This is the convention used by SIMPOW to create the result files. The engineers should also use OPTPOW as the file type for the input data file as shown in this example due to the fact that SIMPOW use OPTPOW, DYNPOW and DYNPOST as default input data file type depending of which SIMPOW function is actually asked for.